## Williamsburg County Water & Sewer Authority

# **2018 Annual Drinking Water Quality Report**

WCWSA SCDHEC #4510007

#### Introduction

WCWSA is pleased to present to our customers the Annual Drinking Water Quality Report for State Water System ID #4510007. Our goal is to provide our customers with a safe, high quality, and dependable supply of drinking water. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water for the period of January 1, 2018 to December 31, 2018.

### Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

- Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no know or expected risk to health. ALGs allow for a margin of safety.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which
  there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to
  control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water.

  There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- ppm: milligrams per liter or parts per million or one ounce in 7,350 gallons of water.
- ppb: micrograms per liter or parts per billion or one ounce in 7,350,000 gallons of water.
- na: not applicable
- ND: Non Detects laboratory analysis indicates that the constituent is not present

### **Test Results of Regulated Contaminants**

Lead and Copper	Date Sampled	MCLG	Action Level (AL) (ppb)	90 <sup>th</sup> Percentile (ppb)	# Sites Over Action Level	Units	Violation	Likely Source of Contamination
Lead	9/2018	0	15	2	1	ppb	N	Erosion of natural deposits; Corrosion of household plumbing systems.
Copper	9/2018	1.3	1.3	0.18	1	mg/L	N	Erosion of natural deposits; Corrosion of household plumbing systems.

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG or MRDLG	MCL, TT, or MRDL	Units	Violation	Likely Source of Contamination
Chlorine	2018	1.43	0.84 - 1.43	4	4	ppm	N	Water additive used to control microbes

Disinfectants and Disinfection By- Products	Sample Date	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Range of Levels Detected	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	2018	N/A	60	11 (LRAA)	5.6 – 18.1	N	By-product of drinking water chlorination
TTHMs (Total Trihalomethanes) (ppb)	2018	N/A	80	54 (LRAA)	18.8 – 59.4	N	By-product of drinking water disinfection

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	10/9/2018	2.5	2.5	4	4.0	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2018	ND	ND	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

#### **Source of Drinking Water**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of
  industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff,
  and septic systems.

 Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

#### **Water Substance**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-comprised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

#### **Water Source**

Your water is provided from the four deep groundwater wells listed below.

- 1. 2522 South Williamsburg County Hwy (G45309)
- 2. 496 Council Rd (G45310)
- 3. 120 Keeler Rd (G45340)
- 4. 2730 Nesmith Rd (G45341)

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Elevated Fluoride Levels Detected in Water System
System ID # 4510007

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic dental discoloration of their permanent teeth (dental fluorosis). The drinking water provided by Williamsburg County Water & Sewer Authority has been tested and part of the system (one of the four wells) has been found to be producing water with a fluoride concentration of 2.5 mg/l.

Dental Fluorosis in its moderate or severe forms may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the US Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this potential cosmetic dental problem.

For more information, please call Lane Mixon at Williamsburg County Water & Sewer Authority at **843-355-8997**. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

Please share this information with all other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses).

This notice is being sent to you by Williamsburg County Water & Sewer Authority.

#### **Customer Assistance**

For more information regarding this report, please contact Lane Mixon with Williamsburg County Water & Sewer Authority at 843-355-8997.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con alguien que lo entienda bien.

Our office hours are Monday – Friday, 8:30AM – 5PM, and we are located at 130 West Main Street, Kingstree, SC 29556.

The public is invited to attend bimonthly County Council Meetings on every 1<sup>st</sup> Monday and 3<sup>rd</sup> Tuesday of each month at 6PM at the Williamsburg County PSA Building, 201 West Main Street, Kingstree, SC 29556.